## IN THE SPECIFICATION

Please replace the paragraph at page 4, lines 1-15, with the following rewritten paragraph:

The phase shift mask generally used in a prior art is a so-called [[a]] line type phase shift mask, ~~it~~ which is constituted by pairs of rectangular areas which are alternately repeated along one direction, and a phase difference of $\pi$ (180 degrees) is given between the adjacent areas. In this case, since a boundary between the adjacent areas constitutes a phase shift portion, light passing through the mask has such a light intensity distribution having an inverse peak pattern such ~~as~~ that a light intensity is minimum or substantially zero at a position on a line corresponding to the phase shift portion and the light intensity is one-dimensionally increased toward the circumference. Thus, a polycrystal semiconductor film or an amorphous semiconductor film is irradiated with such a light.

Please replace the paragraph beginning at page 14, line 24, through page 15, line 12, with the following rewritten paragraph:

In the illumination system 2, a laser beam emitted from the light source 2a is expanded through the beam expander 2b and then enters a first fly-eye lens 2c. In this manner, a plurality of light sources are formed on a rear side focal plane of the first fly-eye lens 2c, and light ~~fluxs~~ fluxes from a plurality of these light sources illuminate an incident plane of a second fly-eye lens 2e in the superimposed manner through a first condenser optical system 2d. As a result, more light sources than those on the rear side focal plane of the first fly-eye lens 2c are formed on a rear side focal plane of the second fly-eye lens 2e. Light ~~fluxs~~ fluxes from a plurality of the light sources formed on the rear side focal plane of the second fly-eye lens 2e illuminate a phase shift mask 1 in the superimposed manner through a second condenser optical system 2f.

Please replace the paragraph beginning at page 15, line 27, through page 16, line 18, with the following rewritten paragraph:

As shown in FIG. 1, a processed substrate 4 is irradiated with the laser beam, which has been phase-modulated via the phase shift mask 1 as will be described later, through an image forming optical system 3. Here, the image forming optical system 3 arranges the phase shift mask 1 and a processed plane [[4]] of the processed substrate 4 so as to be optically conjugate. In other words, the processed substrate 4 is set to a plane which is optically conjugate with the phase shift mask 1 (image plane of the image forming optical system 3). The image forming optical system 3 includes an aperture diaphragm 3a arranged on its pupil plane. The aperture diaphragm 3a can be arranged so as to be appropriately replaceable with respect to a light path when a plurality of aperture diaphragms whose aperture portions (light transmission portions) have different sizes are prepared in advance. This replacement may be manually or automatically carried out.

Please replace the paragraph at page 22, lines 4-25, with the following rewritten paragraph:

However, when an image forming optical system having a regular pupil function that a transmittance distribution is uniform is used, as shown in FIG. 4A, since the point spread function becomes negative in the circumferences (point spread function is a Fourier transform of the pupil function), a relationship between a phase change and a light intensity is not complete, and small waves (fluctuation) 4W ~~remains~~ remain in the light intensity distribution. On the contrary, when using an image forming optical system having a pupil function that a transmittance distribution is lower at the circumference than at the center, e.g., a pupil function that a transmittance distribution is of a Gauss type, as shown in FIG. 4B, a negative part of the point spread function is eliminated. This can be readily understood considering a

fact that the Fourier transform of the Gauss distribution is the Gauss distribution. As a result, the relationship between the phase change and the light intensity becomes further complete, and the small ~~wave~~ waves 4W shown in FIG. 4A can be eliminated from the light intensity distribution.

Please replace the paragraph beginning at page 43, line 22, through page 44, line 17, with the following rewritten paragraph:

As another method, a resist having thicknesses each corresponding to each boundary area section is formed on the part of the quarts substrate corresponding to the boundary area. In this case, the thicknesses of the resist ~~is~~ are set in such a manner that the resist corresponding to the first boundary area section 11a is thickest and the resist becomes gradually ~~thin~~ thinner in a stepped manner toward the ninth boundary area section 11i. Such a resist whose thickness gradually varies can be formed by changing the energy of an electron beam in accordance with each boundary area section by using, e.g., the electron beam lithography. Thereafter, the boundary area sections with different depths are formed by etching the one surface of the quartz substrate. That is, the part with the thinnest resist corresponding to the ninth boundary area section 11i is etched to the largest depth, the part with the thickest resist corresponding to the first boundary area section 11a is etched to the smallest depth, and the parts corresponding to the second to eighth boundary area sections between these sections are etched to the depths corresponding to the respective thicknesses of the resist.